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UNIVERSITY EXAMINATIONS 2024/2025

SECOND YEAR FIRST SEMESTER EXAMINATION FOR DEGREE OF BACHELOR
OF SCIENCE IN APPLIED ACCOUNTING

BFC 3155: MANAGERIAL ACCOUNTING I

DATE: JANUARY 2025

TIME: 2 HOURS

INSTRUCTIONS: Answer Question ONE and any other TWO questions.

QUESTION ONE (30 MARKS)

- a) NFP is an industrial lubricant which is prepared by subjecting certain crude chemicals to two successive processes. The output of process I is transferred to process 2 where it is blended with other chemicals. The process costs for the month of October 2004 were as follows:

Additional information

1. General overhead costs were absorbed into process costs on the basis of labour cost. General overhead for the month of October 2004 amounted to Sh. 357,000.
2. The normal output of process I was 80% of input, while that of process II was 90% of input.
3. Waste material from process I was sold for Sh.2 per kg. while that from process II was sold for Sh.3 per kg.
4. The output for the month of October 2004 was as follows:
5. Process I: 2,300,000kg
6. Process II: 4,000,000kg
7. There was no stock or work in progress of either of the products at the beginning or end of the period.
8. It was assumed that all available waste material had been sold at the prices indicated above.

Required:



MUST is ISO 9001:2015 and



ISO/IEC 27001:2013 CERTIFIED

Demonstrate how the data above would be recorded in:

- i. Process accounts for both processes for the month of October 2004. (10 marks)
 - ii. Finished stock account. (3 marks)
 - iii. Normal loss account. (3 Marks)
 - iv. Abnormal loss and gain account (4marks)
- b) Ardhi Company is considering the type of remuneration scheme to adopt for its employees. The following information is availed to you for your analysis:

	Mambo	Saidi	Mbogo
Actual hours worked	38	36	40
Hourly rate of pay (Sh.)	30	20	25
Output (units) A	42	120	-
B	72	76	-
C	92	-	50
	A	B	C
Standard time allowed per unit (minutes)	6	9	15

For the calculation of piecework earnings, the company values each minute at the rate of Sh.0.5.

Required:

Calculate the earnings for each employee using:

- i. Basic guaranteed hourly rates; (3 marks)
- ii. Piecework rates; (2 marks)
- iii. Premium bonus, given that an employee earns the premium bonus at the rate of two thirds of the time saved. (5 marks)

QUESTION TWO (20 MARKS)

- a) A business firm requires complete, accurate and updated information. A combination of both financial accounting and cost accounting systems can facilitate in the achievement of this goal.

Required:

- i. Distinguish between cost accounting and financial accounting. (4 marks)
- ii. Explain the advantages of a cost accounting system. (4 marks)

b) Alphabeta Production Ltd. manufactures two products, Alpha and Beta. These products are made using similar equipment and methods. Traditionally, the company has used a direct labour hour basis for absorbing overheads. The budgeted results for the month of September 2003 are given below:

	Alpha	Beta
Production/sales (units)	6,000,000	8,000,000
Direct labour (Sh.)	10,800,000	25,600,000
Direct material (Sh.)	9,600,000	14,400,000
Number of production set up hours	25	35
Number of orders	12	60
Direct labour hours per unit	1	2
Machine hours per unit	4	2

The factory was operational for 21600 hours during the month. The overheads incurred in September 2003 were Sh. 280,000,000 whereas the budgeted overhead for the month were Sh. 316,800,000. You are also informed that budgeted overheads can be categorized by activity as follows:

Activity	Sh. '000'
Production set up costs	214,800
Orders handled	36,000
Machine activity	66,000

Required:

- i. Determine the direct labour hour absorption rate (3 marks)
- ii. Compute the over (under) absorbed overheads during the month (2 marks)
- iii. Determine the budgeted cost per unit of each product if the company follows the traditional approach of a single factory wide absorption rate. (3 marks)
- iv. Determine the budgeted cost per unit if the company adopts an activity based approach in dealing with overheads. (4 marks)

QUESTION THREE (20 MARKS)

- a) Briefly explain the following terms as used in cost accounting:
 - i. Mixed costs. (2 marks)
 - ii. Cost behaviour (2 marks)
 - iii. Incremental cost. (2 marks)



- b) Jogi Transporters operate in the transport industry. On 1 December 2005, the management acquired a new lorry to meet customer needs and cater for the increase in business volume.

The following information relates to the initial and maintenance cost of the lorry.

	Shs.
Cost	12,000,000
Scrap value	2,000,000
Insurance premium per annum	400,000
Annual road licence fee	12,000
Replacement of tyres after every 25,000 kilometres	48,000
Maintenance costs after every 5,000 kilometres	15,000
Replacement of spare parts per service	8,000
Price of fuel per litre	60

Additional information:

1. The lorry has an economic life of 4 years.
2. The lorry has 6 tyres each costing Sh. 8,000.
3. Service is carried out after every 5,000 kilometres.
4. On average the lorry covers 20 kilometres per litre of fuel consumed.
5. The lorry is projected to cover 100,000 kilometres in January 2006, 25,000 kilometres in February 2006 and 50,000 kilometres in March 2006.

Required:

Prepare a schedule for the three months showing:

- i. Variable costs per kilometer. (4 marks)
 - ii. Fixed costs per kilometer. (4 marks)
 - iii. Total costs per kilometer. (2 marks)
- c) "Fixed costs are actually variable costs."

With reference to (b) above, explain whether you agree or disagree with the statement. (4 marks)

QUESTION FOUR (20 MARKS)

XYZ Ltd. carries on its business in Nairobi. The company has been reporting its profits using absorption costing system. During the financial year ended 30 September 2005, the following summary statement was provided:



Sales (4,000 units)	Shs.	Shs.
Production cost of sales:		
Variable	3,000,000	
Fixed	<u>1,000,000</u>	<u>(4,000,000)</u>
		1,000,000
Expenses:		
Variable	800,000	
Fixed	<u>800 000</u>	<u>(1,600,000)</u>
Net loss		<u>(600,000)</u>

Currently the company is implementing strategies to improve its profitability, which are to be implemented in two phases; A and B. Each phase will cover a period of six months.

The expected production and sales in units for each of the phases are shown below:

	Phase A	Phase B
	Units	Units
Production	2,500	3,000
Sales	2,400	2,900

The fixed costs are expected to increase by 20% while the variable costs per unit will remain as they were in the previous period. The selling price per unit will be Shs. 1,500.

Required:

- a) Profit and loss statements for phases A and B using.
 - i. Marginal costing. (6 marks)
 - ii. Absorption costing (6 marks)
- b) Briefly explain the differences resulting from the two methods employed in (a) above of reporting profits. (2 marks)
- c) Reconcile the resulting difference in the reported profit under the two methods. (2 marks)



QUESTION FIVE(20MARKS)

- a) Briefly explain the following cost estimation methods;
- High-low method (3 marks)
 - Simple regression method. (3 marks)
- b) The management of Limuru Processing Company Limited wishes to obtain better cost estimates to evaluate the company's operations more effectively.

The following information is provided to you for analysis:

Year 2004	Equivalent Overheads production	
Month	Units ('000')	Sh.'000'
January	1,425	12,185
February	950	9,875
March	1,130	10,450
April	1,690	15,280
May	1,006	9,915
June	834	9,150
July	982	10,133
August	1,259	11,981
September	1,385	12,045
October	1,420	13,180
November	1,125	13,180
December	980	10,430

Additional information:

- In November, the opening work in progress inventory contained 1,000,000 units that were 30% complete with respect to conversion costs.
- During the same month of November, the manufacturing department transferred 1,500,000 units.
- The closing inventory for the month of November was 1,200,000 units and the units were 30% incomplete with respect to conversion costs
- Using the above information, you have obtained the following variables by applying simple regression analysis.



	Sh. '000'
Constant	3,709
Slope	6,487

Required:

- i. Use the high-low method to estimate the overhead cost function. (4 marks)
- ii. Use the regression method to determine the overhead cost function. (4 marks)
- iii. Use the regression function formulated in (ii) above to estimate the overhead cost for the month of November. (4 marks)
- iv. Apart from the above mentioned methods, which other methods could you also use in estimating the overhead cost for November (4 marks)

